



1-5
7-8
14-19

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Alireza Rezaie, et al.

Serial No.: 08/259,321

Group Art Unit: 1806

Filed: June 10, 1994

Examiner: P. Hutzell

For: CALCIUM BINDING RECOMBINANT ANTIBODY AGAINST PROTEIN C

Commissioner of Patents
and Trademarks
Washington, D.C. 20231

**RESPONSE TO RESTRICTION REQUIREMENT AND
INFORMATION DISCLOSURE STATEMENT**

Responsive to the Office Action mailed April 7, 1995, applicant hereby submits

1) A Response to Restriction Requirement, 2) an Information Disclosure Statement, including a Form 1449 and the documents cited therein, and 3) a Request For Change Of Address. It is believed that no fee is due at this time. However, if it is deemed that an extension of time or a fee connected with the enclosed Information Disclosure Statement is required, the Office is authorized to charge the appropriate fee to Deposit Account 01-2507.

Please note that all future correspondence should be directed to:

**Patrea L. Pabst
ARNALL GOLDEN & GREGORY
2800 One Atlantic Center
1201 West Peachtree Street
Atlanta, Georgia 30309**

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Response to Restriction Requirement

In the Office Action mailed April 7, 1995, the claims were divided into three groups, Group I, claims 1-5, 7-8 and 14-19, drawn to antibodies and methods of making recombinant antibodies; Group II, claim 6, drawn to an antibody and a cytokine or inducer of cytokine expression and Group III, claims 9-13, drawn to methods of treatment.

Applicants elect Group I, claims 1-5, 7-8 and 14-19, without traverse.

Information Disclosure Statement

Pursuant to the duty of disclosure under 37 C.F.R. § 1.56, applicants cite the following publications, copies of which are enclosed. The publications marked with an asterisk are unavailable at the present time. Copies will be submitted shortly.

U.S. Patent Documents

<u>Number</u>	<u>Date</u>	<u>Patentee</u>
4,506,009	03/19/85	Lenhoff, et al.
5,147,638	09/15/92	Esmon, et al.
5,202,253	04/13/93	Esmon, et al.
5,298,599	03/29/94	Rezaie, et al.
5,336,610	08/09/94	Esmon, et al.

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Publications

Beckmann, Robert J., et al., "The structure and evolution of a 461 amino acid human protein C precursor and its messenger RNA, based upon the DNA sequence of cloned human liver cDNAs," Nucleic Acids Res. 13(14):5233-5246 (1985)

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Daugherty, et al., Nucl. Acids Res., 19:2471-2476 (1991)*

Dreyfus, Marie, et al., "Treatment of Homozygous Protein C Deficiency and Neonatal Purpura Fulminans with a Purified Protein C Concentrate," New England Journal of Medicine 325(22):1565-1568 (1991)

Esmon, Charles T., "The Regulation of Natural Anticoagulant Pathways," Science 235:1348-1352 (1987)

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Goding, James W., "Purification, Fragmentation and Isotopic Labelling," Monoclonal Antibodies: Principles and Practices 110-113 (Academic Press, Inc.) (1983)

Hendl, Sylvia, et al., "Immunoaffinity purification of protein C with a calcium-dependent monoclonal antibody," Rev. Iberoamer Thromb. Hemostasia 4(1):25-28 (1991)

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Kabat, H.A., et al., Sequences of Proteins of Immunological Interest, 4th Ed. U.S. Dept. Health and Human Services, Bethesda, MD (1987)*

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Laurell, Martin, et al., "Characterization of monoclonal antibodies against human protein C specific for the calcium ion-induced conformation or for the activation peptide region," FEBS Letts. 191(1):75-81 (1985)

Matschiner, et al., Current Advances in Vitamin K Research, pp. 135-140, John W. Suttie, ed. (Elsevier Science Publishing Co., Inc. 1988)*

Max, Edward, et al, J. Biol. Chem. 256:5116-5120 (1981)*

Nakamura, Satoko and Yoichi Sakata, "Immunoaffinity purification of protein C by using conformation-specific monoclonal antibodies to protein C-calcium ion complex," Biochimica et Biophysica Acta 925:85-93 (1987)

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Sugo, et al., Thromb. Hemost. Abstrs., Brussels, 229 (1987)*

Summers, M.D. and G.E. Smith, "A manual of methods for baculovirus vectors and insect cell culture procedures", Texas Agricultural Experimental Station (1987)*

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Taylor, F. B., et al., "Protein C Prevents the Coagulopathic and Lethal Effects of *Escherichia coli* Infusion in the Baboon," J. Clin. Invest. 79:918-925 (1987)

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While this statement is believed to include all of the material presently known to applicants, it should not be interpreted as a representation that an exhaustive search has been conducted or that no better art exists. Moreover, applicants invite the Examiner to make an independent evaluation of the cited art to determine its materiality and relevance to the subject matter of the present application. Applicants are of the opinion that their claims patentably distinguish over the prior art referred to herein, either alone or in combination.

Favorable consideration of claims 1-19 is earnestly solicited.

Respectfully submitted,



Patrea L. Pabst
Reg. No. 31,284

Date: May 8, 1995
ARNALL GOLDEN & GREGORY
2800 One Atlantic Center
1201 West Peachtree Street
Atlanta, Georgia 30309-3400
(404) 873 8794